



COOPERATIVE NATIONAL PARK RESOURCES STUDIES UNIT The University of Arizona, Tucson

The Cooperative National Park Resources Studies Unit/University of Arizona (CPSU/UA) was established August 16, 1973. It is one of five such units in the Western Region (Arizona, California, Hawaii, and Nevada) of the National Park Service (NPS). Principal Arizona cooperators include the School of Renewable Natural Resources in the College of Agriculture and the Department of Ecology and Evolutionary Biology of The University of Arizona. The Western Archeological and Conservation Center (NPS) and the School of Renewable Natural Resources (UA) provide administrative assistance. Unit scientists hold courtesy faculty or research associate appointments at the university.

The CPSU/UA provides a multidisciplinary approach to studies in natural and cultural sciences. Funded projects given high priority by park managers are investigated by NPS and university researchers under coordination of the CPSU. Unit staff also cooperate with researchers involved in projects funded by non-NPS sources to obtain information needed by park managers.

The Technical Report series allows dissemination of reports about high priority resource management needs. The series allows the flexibility of retaining considerable information on study design, methods, results and applications not afforded in formal scientific publications. Technical reports are given peer review and editing; guidelines for report preparation are being developed. Documents in this series usually contain information of a preliminary nature and are prepared primarily for use by NPS personnel and cooperators. Mention of trade names or commercial products does not constitute endorsement and/or use by NPS.



Report on Treaties, Agreements, and Accords Affecting Natural Resource Management at Organ Pipe Cactus National Monument

Carlos Nagel

Special Report No. 8 (Supplement)



August 1991

Cooperative National Park Resources Studies Unit School of Renewable Natural Resources The University of Arizona Tucson, Arizona 85721

AUTHOR

Carlos Nagel Cultural Exchange Service 240 E. Limberlost Tucson, Arizona 85705

TRANSLATION OF APPENDIX XIV BY

Dr. Carina Ramírez

UNIT PERSONNEL

Charles P. Stone, Acting Unit Leader Peter S. Bennett, Research Ecologist Michael R. Kunzmann, Ecologist Katherine L. Hiett, Biological Technician Joan M. Ford, Administrative Clerk Gloria J. Maender, Editorial Assistant

(602) 670-6885 (602) 621-1174 FTS 762-6885

CONTENTS

<u>PAGE</u>
PREFACE is
ACKNOWLEDGEMENTSvi
APPENDIX XIV. The Mexican General Law on Ecological Balance and the Protection
of the Environment
FIRST CAPTION—GENERAL PROVISIONS
CHAPTER I. Preliminary Standards
CHAPTER II. Concurrence Between the Federal Government, the Federal
Entities and the Municipalities4
CHAPTER III. Jurisdiction of the Secretary and Coordination Among the
Branches and Entities of the Federal Public Administration 8
CHAPTER V. Instruments of the Ecology Policy
SECTION V. Evaluation of the Environmental Impact
SECTION VI. Ecological Technical Standards
FOURTH CAPTION—PROTECTION OF THE ENVIRONMENT 14
CHAPTER I. Prevention and Control of Atmospheric Pollution 14
CHAPTER II. Prevention and Control of Water and Aquatic Ecosystem
Pollution 16
CHAPTER III. Prevention and Control of Soil Pollution
CHAPTER IV. Activities Which Are Considered Risks
CHAPTER V. Dangerous Material and Residuals
CHAPTER VII. Noise, Vibration, Thermal and Lumination Energy, Odor and
Visual Pollution
FIFTH CAPTION—SOCIAL PARTICIPATION 29
FIFTH CAPTION—SOCIAL PARTICIPATION
SIXTH CAPTION—CONTROL AND SECURITY METHODS AND
SANCTIONS
CHAPTER I. Observance of the Law
CHAPTER II. Inspection and Enforcement
CHAPTER III. Security Measures
CHAPTER IV. Administrative Sanctions
CHAPTER V. Remedy for Disagreement
CHAPTER VI. About Violations of the Federal Order
CHAPTER VII. Public Accusation
TRANSITORY ARTICLES

PREFACE

In the preface of the "Report on Treaties, Agreements, and Accords Affecting Natural Resource Management at Organ Pipe Cactus National Monument," Special Report No. 8*, Peter Bennett wrote of the need for awareness and accommodation between cultures, particularly when dealing with transborder natural resources. The intensity and frequency of transborder relations between individuals and organizations in Mexico and the United States have been increasing at an exponential rate. It took 50 years for the population of the U.S./Mexico border region to grow from an estimated 1.5 million inhabitants in 1940 to the more than 8 million in 1990. It is estimated that it will take ten years for that figure to double, to 16 million. This growth implies that more and more individuals are coming into contact with people who are different from themselves. As one explores the differences, it becomes apparent that the similarities are much more important. Thus, the imperative need is for individuals from Mexico and the U.S. to know more about each other.

Much is being said about the Free Trade Agreement (FTA) between Mexico and the United States, probably involving Canada as well. Those who live in the border region see the FTA almost as a ratification of what has existed for years: the exchange of goods, services, family relations, education programs, cultural events and of friendships. The FTA comes in the wake of a reality that must be formally ratified at a state level because of its increasing complexity.

There are many legitimate questions about the FTA. There is also much demagoguery that misses the process of change that is forcing an opening of borders—not only in the U.S./Mexico region. This is a global phenomenon.

Mexico has made extraordinary progress—given the political realities—in the area of environmental legislation. Witness Article 27 of the Constitution of Mexico and, more recently, the law on ecology. It is easy to point to the weak enforcement of model legislation. I would ask if our own house is strong enough to resist criticism when we view governmental inability to cope with enormous problems of toxic, solid and liquid wastes.

The translation of the ecology law of Mexico is published here as Appendix XIV, in a supplement to Special Report No. 8, to assist in broadcasting a unique accomplishment of the government of Mexico. It is particularly important for individuals in the U.S. to have access to this document because of the controversy surrounding the environmental issues of the FTA process, specifically about the adequacy of the environmental regulations in Mexico.

^{*}Special Report No.8 was published by the Cooperative National Park Resources Studies Unit, The University of Arizona, Tucson, Arizona, 1988.

As well, this legislation has provided a stronger working relationship between the U.S. Environmental Protection Agency and the Secretariat of Urban Development and Ecology (SEDUE) in Mexico concerning environmental control and enforcement. It is entirely appropriate that this appendix form part of the 1988 publication on the management of natural resources.

Carlos Nagel June 17, 1991

ACKNOWLEDGEMENTS

The existence of the translation into English of the "Ley General del Equilibrio Ecológico y la Protección al Ambiente" was brought to my attention by Buddy Van Dyke of the Productos de Control, S.A. de C.V., a Division of General Electric Corportation in Nogales, Sonora. Subsequently, Richard H. Carter, who is deeply involved as a consultant for hazardous waste disposal in the Southwestern U.S. and well informed about the transboundary contamination problems, led me to the organization that authorized the publication of this document in the present form.

We are indebted to the Border Waste Management Society and its President, Emilio Bruna, for the permission to use this translated material.

Special recognition is given to Dr. Carina Ramírez for the excellent English translation.

APPENDIX XIV

THE GENERAL LAW ON ECOLOGICAL BALANCE AND THE PROTECTION OF THE ENVIRONMENT

Digitized by the Internet Archive in 2012 with funding from LYRASIS Members and Sloan Foundation

(Logo: Presidency of the Republic)

Miguel De La Madrid H., Constitutional President of the United Mexican States, to the People of the Republic, be it known that: the Congress of the Nation has sent me the following decree "the Congress of the United Mexican States decrees: The General Law on Ecological Balance and the Protection of the Environment.

FIRST CAPTION—GENERAL PROVISIONS

CHAPTER I-PRELIMINARY STANDARDS

Article 1. This Law regulates the provisions of the Political Constitution of the United Mexican States which refer to the preservation and restoration of the ecological balance, as well as the protection of the environment, within the national territory and the areas over which the nation exercises its sovereignty and jurisdiction. Its provisions are for the public good and social interest and their objective is to establish a basis for:

- I. Defining the principles of general ecological policies and to regulate the means for its application;
- II. The ecological edict;
- III. The preservation, restoration and improvement of the environment;
- IV. The protection of wilderness areas and the flora and fauna, both wild and aquatic;
- V. The rational utilization of the natural elements in a manner in which the attainment of economic benefits is compatible with the balance of the ecosystems;
- VI. The prevention and control of air, water and soil pollution;
- VII. The concurrence of the federal government, the federal entities and the municipalities on the matter; and
- VIII. The coordination among the diverse branches and entities of Federal Public Administration, as well as society's corresponding participation, concerning the matters pertaining to this edict.

The provisions of this Law will be applied without jeopardizing the contents of other laws relating to specific questions which are related to the matters which this edict regulates.

Article 2. Considered to be of public interest are:

- I. The nation's ecological edict on the portended matters regulated by this and the rest of the applicable laws;
- II. The establishment of areas of priority for the preservation and restoration of ecological balance;
- III. The care of the necessary sites in order to assure the maintenance and growth of genetic resources among both the wild and aquatic flora and fauna, in the face of the danger of serious deterioration or extinction;
- IV. The establishment of intermediate areas of safeguard, because of the presence of activities which are considered hazardous.

* * *

CHAPTER II—CONCURRENCE BETWEEN THE FEDERAL GOVERNMENT, THE FEDERAL ENTITIES AND THE MUNICIPALITIES

Article 4. The lawful rights which the State has in the matter of the preservation and restoration of ecological balance and protection of the environment and which are the object of this Law, will be exercised concurrently by the Federal Government, the federal entities and the municipalities, subject to the following conditions:

- I. Matters which encompass the nation in general or are of national interest are under federal jurisdiction; and
- II. Matters which are not included in the previous paragraph are the responsibility of the states and municipalities, conforming to the authority of this document and other law given them, to exercise exclusively or in conjunction with the federal government in their respective districts.

Article 5. Matters which encompass the nation in general or are of national interest are:

- I. The formulation and carrying out of the general ecology policy;
- II. The formulation of the general ecological criteria which must be observed in the application of the ecological policy documents, for the protection of wilderness

- areas and of the wild and aquatic flora and fauna, for the utilization of natural resources, for the nation's ecological code, and for the prevention and control of air, water and land pollution;
- III. That which by their nature and complexity require the participation of the federal government;
- IV. Those efforts for the preservation and restoration of ecological balance and the protection of the environment which take place in the properties and areas under federal jurisdiction;
- V. That which originates in other countries which affects the ecological balance within the national territory or within the areas over which the nation exercises rights of sovereignty and jurisdiction;
- VI. That which originates in other countries which affects the ecological balance within the national territory or within the areas over which the nation exercises rights of sovereignty and jurisdiction, which affect the ecological balance of other countries;
- VII. That which affects the ecological balance of two or more federal entities;
- VIII. The issuance of technical procedures dealing with matters which are the object of this Law;
 - IX. The prevention and control of environmental emergencies and contingencies, when the magnitude or seriousness of the imbalance to the ecosystems or of the real or potential harm to the population or to the environment makes it necessary;
 - X. The regulation of those activities which must be considered high risk, according to this and other laws and their regulatory provisions, because of the magnitude or seriousness of the consequences that they may produce on the ecological balance or the environment;
 - XI. The creation and administration of wilderness areas protected by the Federal government, with the participation of local authorities in those instances which this and other laws portend;
- XII. The protection of the wild flora and fauna, in order to preserve and develop them, according to the terms of this Law and of the Federal Game Law;
- XIII. The protection of the aquatic flora and fauna, in waters which are national property or over which the nation exercises rights of sovereignty and jurisdiction;

- XIV. The protection of the atmosphere in areas or in cases of broadcasting sources under federal jurisdiction;
- XV. The rational utilization and the prevention and control of the pollution of waters under federal jurisdiction, conforming to this Law, the Federal Water Law, the provisions of international law which are currently in force and the standards from which said provisions are derived;
- XVI. The general ecological code of the nation's territory;
- XVII. The rational utilization of forest resources, conforming to the provisions of the Forestry Law, as well as the rational utilization of the soil through productive activities, conforming with its employment; and the prevention and control of the pollution and deterioration of the soil;
- XVIII. The regulation of those activities related to the exploration and exploitation of underground resources which are retained by the nation under Article 27 of the Political Constitution of the United Mexican States in case they may cause ecological imbalances or harm to the environment;
 - XIX. The regulation of those activities related to dangerous materials or residuals;
 - XX. The prevention and control of pollution emission in areas or in cases of sources emitting pollution under federal jurisdiction, which exceed the maximum permissible levels for noise, vibrations, thermal energy, illumination and odors which are detrimental to the ecological balance or to the environment; and
 - XXI. The remaining matters which are retained by the Federal government under this and other laws.
- Article 6. Federal entities and municipalities are on par with one another, within the confines of their territorial districts and conform to the distribution of power which is established in local laws;
 - I. The formulation of policy and of specific ecological criteria in each federal entity, which remain congruent with those which in its event would have been formulated by the Federal government, on the matters to which this article refers;
 - II. The preservation and restoration of ecological balance and the protection of the environment which is carried out in the properties and areas of jurisdiction belonging to the federal entities and to the municipalities, except when they refer to those matters which are reserved for the Federal government by this or other laws;

- III. The prevention and control of ecological emergencies and environmental contingencies, whether isolated or in conjunction with the Federal government, when the magnitude or seriousness of the ecological imbalances or harm to the environment does not go beyond the territory of the federal entity or of the municipality, or does not make the exclusive action of the Federal government necessary;
- IV. The regulation of those activities which may not be considered high risk when, because of the consequences which they may cause, they affect the ecosystems or the environment of a federal entity or of a corresponding municipality;
- V. The regulation, creation and administration of urban parks and areas subject to ecological conservation, which this Law portends;
- VI. The prevention and control of atmospheric pollution, generated in areas or by emitting sources under state or municipal jurisdiction;
- VII. The establishment of methods to make the prohibition of pollutant emissions which exceed the maximum permissible levels for noise, vibrations, thermal energy, illumination and odors which are a detriment to the ecological balance or to the environment effectual, except in the areas or in the cases of emitting sources under federal jurisdiction;
- VIII. The regulation of rational utilization and the prevention and control of the pollution of waters under the states' jurisdiction;
 - IX. The prevention and control of the pollution of federal waters which are assigned or granted for public service use and of the waters which are discharged into the underground sewage system drains of population centers, without being a detriment to the jurisdiction of the Federal authorities, in the matter of treatment, discharge, infiltration and reuse of residual water, as stated by this Law and the rest of the applicable ones;
 - X. The local ecological code, particularly in areas of human settlements, carried out by the urban development programs and by the rest of the means regulated in this Law, in the General Human Settlement Law and in the local provisions;
 - XI. The regulation, with ecological objectives in mind, of the utilization of mineral or substances which are not reserved for the Federal government, which constitute natural deposits which are similar to the components of the land, as well as rocks or products stemming from their discomposition which may only be used for the manufacture of construction or ornamental materials;

- XII. The preservation and restoration of ecological balance and environmental protection in population centers in relation to the consequences derived from services relating to underground sewage systems, garbage clean-up, markets and wholesale provision centers, cemeteries, slaughter houses, transit and local transportation;
- XIII. The regulation of management and final disposal of residual solids which are not dangerous, conforming to this Law and its regulating provisions; and
- XIV. The remaining matters which are portended in this Law.

Based on the provisions concerning the distribution of authority over the matters which this Law regulates, local governing bodies will expedite them by adjusting their respective constitutions, the councils will issue the laws and regulations of implementation and good government, so that within their respective areas of jurisdiction, the dispositions of this code are complied with.

In the exercise of their authority, the federal entities and, in their case, the municipalities, will observe the provisions of this Law and the rest of the decrees which are derived from it and will apply the ecological technical standards which have been issued by the Department.

Article 7. The Federal Executive Branch, through the Department, and if necessary with the help of other branches, may establish coordination agreements with the governing bodies of the federal entities, and with their participation, with the municipalities, satisfying the legal formalities which prevail in each case, to bring about the procedures in the matters which are the object of this Law.

When the governments of the federal entities and of the municipalities so ask, the Department will lend them the necessary technical assistance.

CHAPTER III—JURISDICTION OF THE SECRETARY AND COORDINATION AMONG THE BRANCHES AND ENTITIES OF THE FEDERAL PUBLIC ADMINISTRATION

Article 8. It is the responsibility of the Department:

- I. To formulate and convey the general ecology policy;
- II. To apply, in its area of jurisdiction, this Law, its regulations and the ecological technical standards which are set forth and to enforce their compliance;

- III. To bring about the different actions within his prescribed duties in order to preserve, protect and restore ecological balance and the environment, coordinating in each case, with the rest of the branches of Federal Public Administration, according to their respective areas of responsibility;
- IV. To coordinate studies and efforts in order to propose the creation of protected wilderness areas, in agreement with the provision in Caption II of this Law, with the input which belongs to the other branches of Federal Public Administration and to local authorities, and to participate in those actions which ought to be brought about in accordance with the resolutions of the Executive Branch;
- V. To formulate and develop programs to preserve and restore ecological balance and propitiate the integral management of natural resources;
- VI. To program the general ecological code of the nation, in coordination with the rest of the branches of the Federal Executive Branch and local authorities, according to their respective areas of jurisdiction;
- VII. Expedite the ecological technical standards which will be observed throughout the entire nation;
- VIII. To formulate the ecological criteria which must be observed in the application of the general ecological policy; the protection of wild and aquatic flora and fauna; the utilization of natural resources; the general ecological code of the nation; and the prevention and control of air, water and soil pollution; with the participation, if that is the case, of the other responsible branches;
 - IX. To evaluate the environmental impact of the activities which are referred to in Articles 28 and 29 of this Law;
 - X. To formulate and convey the environmental health policy, in coordination with the Department of Health, in that which is relevant to human health;
 - XI. To propose to the Federal Executive Branch those provisions which regulate activities related to dangerous materials or residuals, in coordination with the Department of Health;
- XII. To determine the application of technologies which reduce the pollutant emissions of motor vehicles, in coordination with the Departments of Commerce and Industrial Development and of Energy, Mines and State-operated Industry;
- XIII. To expedite the ecological technical standards which must be incorporated into the official Mexican standards established for products used for burning or for energy sources;

- XIV. To propose to the Federal Executive Branch those provisions which regulate the ecological consequences of pesticides, fertilizers and toxic substances in coordination with the Departments of Agriculture and Water Resources, of Health, and of Commerce and Industrial Development;
- XV. To propose to the Federal Executive Branch the issuance of provisions which are conducive to the preservation and restoration of ecological balance;
- XVI. To propose to the Federal Executive Branch the adoption of the necessary measures for the prevention and control of the environmental contingencies and to apply them in the area of its jurisdiction;
- XVII. To coordinate the application, on the part of the branches and entities of Federal Public Administration, of the measures which the Federal Executive Branch determines for the prevention and control of environmental contingencies;
- XVIII. To come to an agreement on actions with the social and private sectors;
 - XIX. To formulate and develop programs to promote the use of appropriate technology for the utilization of natural resources, considering the different ecological regions of the country; and
 - XX. All the rest which conforms to this or other laws or regulatory provisions which are related to it.

* * *

- Article 11. The diverse branches of the Federal Executive Branch will exercise the authority which other laws have granted them, in matters related to the objective of this edict, observing the provision of Parts III and IV of Article 8 of this Law.
- Article 12. The National Ecological Commission is a permanent agency of interdepartmental coordination which also will serve to promote the spirit of cooperation between society and the State on the matter.

Said agency will function as an interdepartmental commission, and will integrate itself and function according to that which the Federal Executive Branch decrees.

The Commission will analyze problems and propose ecological priorities, programs and actions. For the effective fulfillment of their work, the branches and entities of the Federal Public Administration whose duties are related to the objective of the Commission may participate in that Commission. The representatives of the state and

municipal governments will be invited to participate when it deals with situations of considerable environmental impact on the corresponding entity or municipality, and by agreement of the Commission, there will also be members from the social and private sectors, producers' organizations, civil organizations and educational institutions, as well as other representatives of society.

Every six months, the Commission will present a detailed report of the general situation on the matter of ecological balance and environmental protection in the country to the Federal Executive Branch through the Department.

Article 13. In the case of ecological emergencies, the Department of Administration, the Department (of Ecology), and the rest of the appropriate authorities will propose necessary measures to the Federal Executive Branch in a coordinated manner.

* * *

CHAPTER V-INSTRUMENTS OF THE ECOLOGY POLICY

* *

Section V-Evaluation of the Environmental Impact

Article 28. The development of public or private works or activities which may cause ecological imbalance or exceed the limits or conditions cited in the regulations and the ecological technical standards set out by the Federal government for the protection of the environment, must be subject to the previous authorization of the Federal government, through the Department or through the federal entities or municipalities, conforming to the jurisdiction which this Law cites, as well as the fulfillment of the requirements which are imposed upon them once the environmental impact which they may generate is evaluated, without being a detriment to other authorizations which are under the jurisdiction of the appropriate authorities.

When the evaluation of environmental impact of the development of works or activities whose objective is the utilization of natural resources is dealt with, the Department will require that the interested parties include in the declaration of corresponding environmental impact the description of the possible consequences of said works or activities upon the ecosystem which is dealt with, considering the entirety of the elements they include and not only the resources which would be subject to utilization.

Article 29. It will be the duty of the Federal government, through the Department, to evaluate the environmental impact which is referred to in Article 28 of this Law, particularly dealing with the following matters;

- I. Federal public works;
- II. Water works; general communication modes, oil ducts, gas ducts and coal ducts;
- III. Chemical petrochemical, iron and steel metallurgy, paper, sugar, refreshment, cement, automotive, and electrical generation and transmission industry;
- IV. Exploration, extraction, treatment and refinement of both mineral and non-mineral substances reserved for the Nation;
- V. Federal tourist development;
- VI. Installations for the treatment, confinement or elimination of dangerous residuals, as well as radioactive residuals; and
- VII. Forestall utilization of woods and tropical forests and of species which are difficult to regenerate, in those cases previously seen in the second paragraph of Article 56 of the Forestry Law.

Article 30. In the carrying out of studies and in the granting of permits and authorizations for forest utilization, change in the use of forest lands and the extraction of materials from said lands, the general dictates of environmental impact for regions, definite territorial ecosystems for plant species, which are set forth by the Department in the terms previously seen in Article 23 of the Forestry Law must be considered.

Article 31. It is the duty of federal entities and of the municipalities to evaluate the environmental impact in manners not covered in Article 29 of this edict, nor reserved for the Nation in this or other laws.

Article 32. To obtain the authorization which is referred to in Article 28 of this edict, the interested parties must present a declaration of environmental impact to the corresponding authority. In this case, said declaration must by accompanied by a study of the risk of the work, of its modifications, or of previously seen activities, consistent with the preventive and correctional technical measures by which to mitigate the adverse consequences to the ecological balance during its execution, normal operation and in case of accident.

The Department will establish the registry in which to record the lenders of services who bring about studies on environmental impact and will determine the requirements and

procedures of a technical nature which said lenders of services must satisfy in order to be enrolled.

Article 33. Once the declaration of environmental impact is presented and the requirements formulated by the appropriate authority are satisfied, any person will be allowed to consult the corresponding file.

Article 34. Once the declaration of environmental impact has been evaluated, the Department in cases previously seen in Article 29 of this Law or if it applies, the Department of the Federal District, will issue the corresponding resolution.

In said resolution authorization may be granted for the execution of the work or the bringing about of the activity which is dealt with, on the terms which are asked for; or it may deny said authorization, or grant it on the condition that there is a modification of the work project or activity, in order to avoid or diminish adverse environmental impact susceptible to being produced in the normal operation and even in the case of an accident. When conditional authorizations are dealt with, the Department or if it applies the Department of the Federal District will indicate the requirements which must be observed for the execution of the work or the bringing about of the activity previously seen.

Article 35. The Federal government, through the Department, will lend technical assistance to the state and municipal governments which so ask for it, for the evaluation of the declaration of environmental impact or of the study of risk if it should apply.

Section VI: Ecological Technical Standards

Article 36. For the effectiveness of this Law, it is understood by ecological technical standards, the collection of scientific or technological rules set forth by the Department, which establishes the requirements, specifications, conditions, procedures, parameters, and permissible limits which must be observed in the development of activities or use and destination of properties which cause or may cause ecological imbalance or harm to the environment and, in addition, to make the principles, criteria, policies and strategies in the matter consistent.

Article 37. The activities and services which generate emanations, emissions, discharges or deposits, which cause or may cause ecological imbalance ar produce harm to the environment or affect the natural resources, the health, the welfare of the population, or the property of the State or of its individuals, must observe the limitations and procedures which are established in the applicable ecological technical standards.

* * *

FOURTH CAPTION—PROTECTION OF THE ENVIRONMENT

CHAPTER I-PREVENTION AND CONTROL OF ATMOSPHERIC POLLUTION

Article 110. For the protection of the atmosphere, the following criteria will be considered:

- I. The quality of the air must be satisfactory in all areas of human habitation and in every region of the country; and
- II. The emissions of pollutants of the atmosphere, whether from artificial or natural sources, fixed or mobile, must be reduced and controlled, in order to assure a satisfactory quality of air for the welfare of the population and for ecological balance.

Article 111. In order to control, reduce or avoid the pollution of the atmosphere, the Department:

- I. Will expedite, in conjunction with the Department of Health in that which is related to human health, the corresponding ecological technical standards, specifying the permissible levels of emission and immission of the pollutant and of the source of pollutants, complying with the respective regulation;
- II. Will agree upon, and if necessary, will be able to require the installation of emission control equipment by entities whose pollutant activities are brought about in areas located in two or more federal entities, and when it deals with federal property or areas of jurisdiction;
- III. Will expedite the ecological technical standards for the establishment and operation of air quality monitoring systems;
- IV. Will expedite the ecological technical standards to be used for the certification, by the authority in charge, of the levels of air pollutant emission stemming from specified sources;
- V. Will expedite, in coordination with the energy sector and the Department of Commerce and Industrial Development, the ecological technical standards which must be observed by the automotive industry in order to reduce those emissions which are of vehicular origin, considering the rate of maximum concentration of environmental pollutants permissible for human beings, which is determined by the Department of Health;

VI. Will promote, in coordination with the corresponding authorities, the establishment of vehicular volume verification systems.

Article 112. In the matter of atmospheric pollution, the state and municipal governments in their respective jurisdictional duties:

- I. Will bring to fruition the procedures for the prevention and control of air pollution in the properties and areas under state jurisdiction;
- II. Will apply the general criteria for the protection of the atmosphere in the declarations of use, destination, reserves and provisions, defining those areas in which the installation of pollutant industries may be permitted;
- III. Will agree upon, with those who bring about pollutant activities, and if it applies, will require the installation of emission control equipment when activities under local jurisdiction are dealt with, and will promote said installation before the Department in the case of federal jurisdiction;
- IV. Will integrate and maintain a running inventory of acknowledged pollutant origins, and will evaluate the environmental impact in the case of local jurisdiction previously seen in Article 31 of this Law;
 - V. Will establish and operate emission verification systems for automotives in use;
- VI. Will establish and operate, with the technical assistance, if necessary, from the Department, systems which monitor the quality of air. Said systems must comply with the technical code previously issued by the Department. This will promote, through coordinating agreements, the incorporation of the local monitoring reports with national information, and such integration will be the duty of that Department;
- VII. Will establish requirements and procedures to regulate the emission of public transportation, except that of the federal government, and the transit methods, and if necessary, the suspension of its services, in cases of severe pollution;
- VIII. Will take necessary preventative measures to avoid environmental contingencies caused by atmospheric pollution;
 - IX. Will develop detailed information on the state of the environment in the corresponding entity or municipality, which coincide with the Department according to the coordination agreements which they carry out;
 - X. Will impose sanctions and measures against infractions of the laws which in effect are expedited by local legislation, or against infractions of the laws and

regulations of policy and good government which are expedited by the councils, in agreement with this law; and

XI. Will exercise the remaining duties which have been conferred upon them by the applicable regulations and legal provisions.

* * *

Article 114. The appropriate authorities will promote, in the areas which would have been determined fit for industrial use, which are near inhabited areas, the installation of industries which utilize technologies and combustibles which generate the least pollution.

Article 115. The Department will promote that which, in the determination of soil uses which are defined by the respective urban development programs, take into consideration the topographical, climatological and meteorological conditions, in order to assure the adequate dispersal of pollutants.

Article 116. For granting of fiscal incentives, the appropriate authorities will reward whomever:

- I. Adds, installs or operates equipment for the control of pollutant emissions into the atmosphere;
- II. Manufactures, installs or maintains equipment to filter, burn, control, and in general, treat the emissions which pollute the atmosphere;
- III. Bring about technological investigations whose application lessens the generation of pollutant emissions; and
- IV. Situate or relocate their installations in order to avoid pollutant emissions in urban areas.

CHAPTER II—PREVENTION AND CONTROL OF WATER AND AQUATIC ECOSYSTEM POLLUTION

Article 117. For the prevention and control of water pollution the following criteria will be considered:

I. The prevention and control of water pollution is fundamental in order to avoid reduction of its availability and in order to protect the ecosystems of the country;

- II. It is the responsibility of the State and of society to prevent the pollution of rivers, river basins, waterways, marine waters and the rest of the water depositories and running waters, including underground waters;
- III. The utilization of water in production activities which are susceptible to producing pollution also carries the responsibility for the treatment of its discharges, in order to restore this water to a condition which is adequate for its utilization in other activities and to maintain the balance of the ecosystems;
- IV. Residual waters which originate in urban areas ought to receive treatment previous to its discharge into rivers, river basins, waterways, marine waters and the rest of the water depositories and running waters, including underground waters; and
- V. The participation and co-responsibility of society is indispensable to the avoidance of water pollution.

Article 118. The criteria for the prevention and control of water pollution will consist of:

- I. The establishment of sanitary criteria for the use, treatment and disposal of residual waters, in order to avoid risk and harm to the public health;
- II. The formulation of technical standards which must satisfy the treatment of water for human use and consumption;
- III. The agreements executed by the Federal Executive Branch for the granting of water as a whole to concessionary systems or to concessionaries, especially in that which refers to the determination of residual water treatment systems which much be installed;
- IV. The restriction or suspension of operations or utilization which is ordered by the Department of Agriculture and Water Resources, in cases of disease, scarcity or pollution of the provisional sources, or in order to protect the services of drinkable water;
- V. The concessions, allotments, permits and in general, authorizations which must be obtained by the concessionaries, beneficiaries, holders of permits, and in general concessionaries of waters which are the property of the nation, to conduct residual waters into the fields, or to discharge them into other receptacles apart from the underground drains pertaining to populated areas; and
- VI. The organization, direction and regulation of hydrological jobs in river basins, river beds, and river sources of national waters both on the surface and underground.

Article 119. For the prevention and control of water pollution, it will be the duty:

I. Of the Department:

- A) To expedite, in coordination with the Department of Agriculture and Water Resources, and the rest of the appropriate authorities, the technical standards for the effusion of residual waters in collection systems, river basins, river beds, waterways, marine waters and the rest of the water depositories and running water, as well as for the draining of them into the ground;
- B) To issue the criteria, features, requirements and the rest of the conditions which must be satisfied in order to regulate the removal, exploitation, use or utilization of residual waters, for the purpose of avoiding pollution which affects the balance of the ecosystems or its components, and if it applies, in coordination with the Department of Health, when public health seems to be in danger;
- C) To expedite the ecological technical standards to which the storage of residual waters are subject, with the intervention of other branches if the case falls under their jurisdiction;
- D) Judge the application for permits to drain or discharge residual waters into the fields or into drains other than the underground sewage drains;
- E) Establish special discharge conditions when dealing with residual waters generated in properties and areas under federal jurisdiction and those spilled directly into waters which are national property;
- F) Establish special discharge conditions for those who generate residual waters which are taken by underground sewage drains, when said systems spill their waters directly into river beds, rivers, river basins, waterways, and the rest of the water depositories and running waters which are national property, without observing the ecological technical standards or, if it applies, the special discharge conditions which have been established by the Department;
- G) To promote the reuse of treated residual waters in agricultural and industrial activities;
- H) To determine the residual water treatment processes, considering the sanitary criteria in the matter of public health which are set forth by the Department of Health, according to the destination of these waters and the condition of the receptacle which will receive them, and such processes will be incorporated into the agreements that the Federal Executive Branch decrees

- for the granting of water as a whole to concessionary systems or to concessionaries, conforming to the Federal Water Law;
- I) To make a decision on the applications for authorization to establish treatment plants and their common discharges, when said pollutant discharges come from two or more works, installations, or industries under federal jurisdiction, taking into consideration the sanitary criteria which has been established by the Department of Health. This authorization may only be granted when the effect on the river basins of national waters permit it, conforming to the uses determined by the Department of Agriculture and Water Resources; and
- J) To promote the incorporation of systems which separate residual waters of domestic origin from those of industrial origin in the drains pertaining to population centers, as well as the installation of treatment plants to avoid water pollution.
- II. Of the Department, in coordination with the Department of Agriculture and Water Resources and the Department of Health:
 - A) To expedite the ecological technical standards for the use or utilization of residual waters;
 - B) To issue an opinion on what the programming and construction of new industries which may produce polluting discharges in residual waters must be subjected to, as well as the works and installations promoting the purification of residual waters stemming from industry in those cases of federal jurisdiction; and
 - C) To expedite the ecological technical standards which must be observed for the treatment of residual waters of urban origin which are destined for industry of for agriculture. In order to exercise this duty, said branches will use the studies of the river basin and corresponding systems as a basis.
- III. Of the Department of Agriculture and Water Resources, to resolve applications for concessions, permits or authorizations which are made for the exploitation, use or utilization of residual waters, considering the criteria and features, for the preservation of ecological balance;
- IV. Of the Department to expedite technical standards for the execution of works related to the shipment, treatment and destination of residual waters, whether or not conducted by the underground sewage systems, considering the sanitary criteria established by the Department of Health; and

- V. Of the states and municipalities:
 - A) The control of the discharge of residual waters into the drainage and underground sewage systems;
 - B) To require the installation of treatment systems of those who are responsible for the discharge into said systems and who do not satisfy the ecological technical standards which have been expedited;
 - C) To determine the amount of corresponding rights for which the respective municipality or state authority may bring about the necessary treatment, and if necessary, proceed with the imposition of sanctions which are appropriate; and
 - D) To carry out and finalize the registration of the discharges into the drainage systems and the underground sewers which they administer, which will be integrated into the national discharge register in the care of the Department.

Article 120. To avoid water pollution, the following are subject to federal or local regulation:

- I. Discharges of industrial origin;
- II. Discharges of municipal origin and their uncontrolled mixture with other discharges;
- III. Discharges derived from the activities of agribusiness;
- IV. Discharges of refuse, substances or residuals generated by those activities which extract resources which are not replaceable;
- V. The application of pesticides, fertilizers and toxic substances;
- VI. Infiltrations which affect the water tables; and
- VII. The spilling of solid residuals into bodies of water and running water.

Article 121. Residual waters which contain pollutants may not be discharged or drained into any body of water or running water or into the soil or subsoil without previous treatment and permission or authorization from the federal authority, or from the local authority in cases of discharge of water under local jurisdiction or into the drainage systems or underground sewers pertaining to population centers.

- Article 122. Residual waters stemming from municipal, public or domestic use and those from industrial or agribusiness use which are discharged into the underground sewer systems in inhabited areas or into the river basins, rivers, river beds, waterways and the rest of the water depositories or running water, as well as those which by whatever means drain into the subsoil, and in general, those which leak into the soil, must reconcile the necessary conditions in order to prevent:
 - I. Contamination of the bodies which receive them;
 - II. Interference with the processes of water purification;
 - III. Reversals, impediments or alterations in the correct utilization, or in the adequate functioning of the systems, and in the hydraulic capacity of the river basins, river beds, waterways, water tables and the rest of the reserves which are national property, as well as the underground sewage systems.
- Article 123. All discharges into collective systems, rivers, river basins, river beds, waterways, marine waters and the rest of the water depositories and running water and the leaking of residual waters into the soil or its drainage into the ground, must satisfy the ecological technical standards which are expedited for such purposes, and if it applies, the special conditions of discharge which are determined by the Department or the local authorities. It will be the duty of whomever generates said discharges to see to the treatment previously required.

When said discharges, leaks or drainage contain dangerous materials or residuals, they must have the previous authorizations of the Department.

- Article 124. When residual waters affect or may affect sources which provide water, the Department will communicate with the Department of Health and will promote the negation of the corresponding permit or authorization before the appropriate authority, or promote its immediate revocation, and if it applies, the suspension of the distribution.
- Article 125. The Department, considering the sanitary criteria which in the matter of general health are established by the Department of Health, as well as the uses of the river basins of national waters determined by the Department of Agriculture and Water Resources, will determine the special discharge conditions and the treatment systems which must be installed by the branches and entities of Federal Public Administration, for the discharge of residual waters.
- Article 126. The equipment for the treatment of residual waters of urban origin which are designed, operated or administered by the municipalities, the state authorities, or the Department of the Federal District, must comply with the ecological technical standards which have been expedited for that end.

Article 127. The Department, and the Departments of Agriculture and Water Resources and of Health, will issue opinions, based on the studies of the river basin and corresponding systems, for the programming and construction of works and installations for the purification of residual waters stemming from industry.

Article 128. Residual waters stemming from urban underground sewers may be utilized in industry and agriculture, if they are submitted, in those cases in which it is required, to the treatment which complies with the technical standards issued by the Department, in coordination with the Departments of Agriculture and Water Resources and of Health.

In the existing utilization of residual waters in agriculture, actions will be promoted to improve the quality of the resource, the regulation of farming and the irrigation practices.

Article 129. The granting of allotments, authorizations, concessions or permits for the exploitation, use or utilization of water in economic activities which are susceptible to the contamination of said resource will be conditional to the necessary previous treatment of the residual waters which they produce.

Article 130. The Department will resolve the applications for authorization to discharge residual waters, substances, or whatever other kind of residual into marine waters, establishing in each case, the ecological technical standards, conditions and treatment of the water and residuals, concurring with the corresponding regulation. When the origin of the discharges stems from mobile sources or from fixed platforms in the national sea waters and in the exclusive economic areas, the Department will coordinate with the Department of the Navy for the issuance of the corresponding authorizations.

Article 131. For the protection of marine environment, the Federal Executive Branch will issue the criteria for the exploitation, conservation and administration of the natural resources, both live and abiotic, of the floor and the subfloor of the sea and of the surface waters, as well as those criteria which must be observed in order to bring about the activities of exploration and exploitation in the exclusive economic area.

Article 132. The Department will coordinate with the Departments of the Navy, of Energy, Mines and State-operated Industry, of Health, of Communications and Transport and of Fishing, so that in the exercise of their respective jurisdictions and duties, they can assist to prevent, control, enforce and abate the pollution of marine environment, and preserve and restore the balance of its ecosystems, in accordance with that which is established in this Law, the Federal Marine Law, the rest of the applicable provisions and the standards of international law which are in force.

Article 133. The Department and the Department of Agriculture and Water Resources, with the participation which, if it applies conforming to other legal provisions, belongs to the Department of Health, will bring about a systematic and permanent monitoring of the quality of the waters, to detect the presence of pollutants or an excess of organic

the quality of the waters, to detect the presence of pollutants or an excess of organic wastes and apply the measures which legally apply or, if necessary, to promote their execution. In the case of waters under local jurisdiction, they will be coordinated with the state and municipal authorities.

CHAPTER III-PREVENTION AND CONTROL OF SOIL POLLUTION

Article 134. For the prevention and control of soil pollution, the following criteria will be considered:

- I. It is the duty of both the State and of society to prevent soil pollution;
- II. Residuals must be controlled in so much as they constitute the principal source of soil pollution;
- III. It is necessary to be reasonable in the generation of municipal and industrial solid residuals; and to incorporate techniques and procedures for their reuse and recycling; and
- IV. The utilization of pesticides, fertilizers and toxic substances must be compatible with the balance of the ecosystem.

Article 135. The criteria to prevent and control soil pollution will be considered in the following cases:

- I. The planning and regulation of urban development;
- II. The operation of the garbage service systems and of the final disposal of municipal residuals in sanitary landfills;
- III. The authorization for the installation and operation of residual collectors or depositories; and
- IV. The granting of all kinds of authorizations for the manufacture, importation, utilization and in general the bringing about of activities related to pesticides, fertilizers and toxic substances.

Article 136. Residuals which accumulate or may accumulate and are deposited or drain into the soil must reconcile with the necessary conditions to prevent or avoid:

I. Soil pollution;

- II. Noxious alterations in the biological process of the soil;
- III. Alterations in the soil which alter its utilization, use or exploitation; and
- IV. Health risks and problems.
- Article 137. The execution of the systems of collection, storage, transport, shipment, reuse, treatment and final disposal of municipal solid residuals remains subject to the authorization of the state governments or, if it applies, of the municipalities, according to the ecological technical standards expedited by the Department toward that end. Dangerous materials and residuals will be subject to the provision in Chapter V under this same Caption.
- Article 138. The Department will promote the formalization of coordination and consultation agreements with state and municipal governments for:
 - I. The adoption and improvement of systems of collection, treatment and final disposition of municipal solid residuals; and
 - II. The identification of alternatives for the reutilization and final disposal of municipal solid residuals, including the development of inventories of the same and of their generating sources.
- Article 139. Every discharge, deposit or drainage of pollutant substances or materials into the soils will be subject to that which is set forth in this Law, its regulatory provisions and the ecological technical standards which are expedited toward that end.
- Article 140. The industrial processes which generate residuals of lingering deterioration will be carried out according to that which the corresponding regulation decrees.
- Article 141. The Department of Commerce and Industrial Development will promote the manufacture and utilization of packing crates and vessels for all kinds of products whose materials serve to reduce the generation of solid residuals.
- Article 142. In no instance may the importation of residuals for their diffusion, deposit, confinement, storage, incineration or whatever treatment for their destruction or final disposition in the national territory or in the areas over which the nation exercises its sovereignty and jurisdiction be authorized. The authorizations for the transit of residuals which are not dangerous through the national territory and destined for another nation may only be granted when that nation has given previous consent.
- Article 143. Pesticides, fertilizers and toxic substances will remain subject to official Mexican standards and to the technical standards which are expedited in a coordinated manner by the Department and the Departments of Agriculture and Water Resources, of

Health and of Commerce and Industrial Development, in order to avoid the ecological imbalances caused by them. The provision of this Law will establish the regulation, which within the same framework of coordination, must be observed in activities related to said substances or products, including the final disposition of their residuals, empty packing crates and vessels, measures to avoid adverse consequences upon the ecosystems and the procedures for the granting of the corresponding authorizations.

Article 144. Heeding the provision of this Law, that of the United Mexican States Truck-farming Stability, and the rest of the legal provisions and applicable regulations, the Department, in coordination with the Departments of Health, of Agriculture and Water Resources and of Commerce and Industrial Development, will participate in the examination of the tariff rates related to the importation or exportation of pesticides, fertilizers, and toxic substances when its use is not permitted in the country in which it has been developed or manufactured. The Department will promote the establishment of special requirements for the manufacture within the country of said substances and products, when their use may cause ecological imbalance, before the appropriate authorities.

CHAPTER IV-ACTIVITIES WHICH ARE CONSIDERED RISKS

Article 145. The secretary will promote the specification of areas in which the establishment of industries, businesses or services which are considered risks because of the seriousness of the consequences which they may generate in the ecosystems or in the environment is permitted, in the determination of the uses of the soil, taking into consideration:

- I. The topographical, meteorological and climatological conditions of the areas;
- II. Their proximity to population centers, projecting the growth tendencies of the respective settlement and the creation of new settlements;
- III. The impact which a possible extraordinary accident of the industry, business or service which is dealt with might have on the population centers and on the natural resources;
- IV. The compatibility with other activities in the areas;
- V. The existing and needed infrastructure for ecological emergencies procedure; and
- VI. The infrastructure for basic services financing.

Article 146. The Department of the Interior and the Department, with the previous opinions of the Departments of Energy, Mines and State-operated Industry, of

Publication the list of those activities which must be considered high risk, toward that end which is established in the Law.

Article 147. The fruition of high risk industrial, commercial and service activities will be brought about adhering to the provision of this Law, the regulatory provisions which emanate from it and the technical security and operational standards with are issued, in a coordinated manner, by the Department and the Departments of Energy, Mines and State-operated Industry, of Commerce and Industrial Development, of Health and of Labor and Social Planning. For such end, in those establishments in which activities considered high risk are carried out, the equipment and installations which correspond to the agreement on technical standards which has been issued must be incorporated.

Those who carry out high risk activities will develop, fulfill, and in terms of the corresponding regulation, will submit to the approval of the Department and the Departments of Energy, Mines and State-operated Industry, of Commerce and Industrial Development, of Health, and of Labor and Social Planning, those programs for the prevention of accidents which may cause serious ecological imbalance during the fulfillment of such activities.

When these high risk activities are carried out or are going to be carried out in the Federal District, the Department of the Federal District will participate in the analysis and, if it applies, in the approval of the corresponding prevention programs.

Article 148. The federal entities and the municipalities will regulate the fulfillment of activities which are not considered high risk, when these affect the balance of the ecosystems or the environment of the federal entity in general, or of the corresponding municipality.

Article 149. The regulation to which the previous article refers will be the responsibility of the municipalities, when in the fulfillment of activities which are not considered high risk generate residuals which may be spilled into the drainage systems and the underground sewers of population centers or mixed into the garbage; as well as when activities related to residuals which are not dangerous and which are generated by public services whose regulation or management are the duty of their municipalities or are related to said services are dealt with.

CHAPTER V-DANGEROUS MATERIAL AND RESIDUALS

Article 150. The Department, with the previous opinions of the Departments of Commerce and Industrial Development, of Health, of Energy, Mines and State-operated Industry, of Agriculture and Water Resources and the Department of the Interior, will determine and publish in the Official Federal Publication the list of dangerous materials and residuals for that end which is established in this Law.

determine and publish in the Official Federal Publication the list of dangerous materials and residuals for that end which is established in this Law.

- Article 151. The installation and operation of systems for the collection, storage, transport, shipping, reuse, treatment, recycling, incineration and final disposal of dangerous residuals will require previous authorization by the Department.
- Article 152. The materials and residuals which are defined as dangerous for the ecological balance must be managed in compliance with the ecological technical standards and procedures established by the Department, with the participation of the Departments of Commerce and Industrial Development, of Health, of Energy, Mines and State-operated Industry, and of Agriculture and Water Resources.
- Article 153. The importation or exportation of dangerous materials or residuals will be subject to the restrictions established by the Federal Executive Branch. In every case, the following provisions must be observed:
 - I. The ecological control and enforcement of dangerous materials or residuals which are imported or exported will be the duty of the Department, applying the corresponding security measures, without jeopardizing that which the Customs Law portends on this matter;
 - II. The importation of dangerous materials or residuals for its treatment, recycling or reuse may be authorized only when its utilization conforms to the current laws, regulations and provisions;
 - III. The importation of dangerous materials or residuals whose only object is its final disposal or simple deposit, storage or confinement in the national territory or in the areas over which the nation exercises its sovereignty and jurisdiction may not be authorized;
 - IV. The transport through national territory of dangerous materials which do not satisfy the specifications of use or consumption conforming to those which were developed, or whose development, use or consumption are prohibited or restricted in the country for which they were destined may not be authorized; nor may said transport of dangerous residuals be authorized, when such materials and residuals come from a foreign country with its destination in a third country.
 - V. The granting of authorizations for the exportation of dangerous materials or residuals whose sole object is its final disposal in the foreign country will remain subject to the express consent of the receiving country;
 - VI. Dangerous materials and residuals generated during the processes of production, transformation, development or repair which have utilized raw material which

were first introduced into the country under the temporary importation rule, including the regulations in Article 85 of the Customs Law, must be returned to the country from whence they came within the time period determined by the Department for such end;

- VII. The granting of authorizations on the part of the Department for the importation or exportation of dangerous materials or residuals will remain subject to duly guarantee compliance with that which is established by this Law and the rest of the applicable provisions, as well as compensation for the harm and damages which they may cause in the national territory as well as in the foreign country; and
- VIII. In addition to that which is established by other applicable provisions, authorizations may be revoked which have been granted for the importation or exportation of dangerous materials and residuals, without jeopardizing the imposition of the corresponding sanction or sanctions, in the following cases:
 - A) When, because of extenuating circumstances, it is proven that the authorized dangerous materials and residuals constitute a greater risk for the ecological balance than was thought when it was granted by the appropriate authority;
 - B) When the importation or exportation operation does not meet the requirements set forth by the ecological guide issued by the Department;
 - C) When the dangerous materials or residuals no longer have the attributes or characteristics conforming to those which were authorized; and
 - D) When it is determined that the corresponding application contains false data, or is presented in a manner which hides information which is necessary for the correct assessment of the application.

* * *

CHAPTER VII—NOISE, VIBRATION, THERMAL AND LUMINATION ENERGY, ODOR AND VISUAL POLLUTION

Article 155. Emissions of noise, vibration, thermal and lumination energy, and the generation of visual pollution, in so much as they exceed the maximum limits of the ecological technical standards which have been issued by the Department towards this end, considering the measurements of maximum permissible concentration of pollutants in the environment for humans which are determined by the Department of Health remain prohibited. Federal or local authorities, in the exercise of their duties, will adopt measures to prevent the violation of said limits and, if necessary, will apply the corresponding sanctions.

In the construction of works and installations which generate thermal energy, noise or vibrations, as well as in the operation of functioning of the existing ones, preventative and corrective actions must be carried out in order to avoid the noxious consequences of such pollutants.

Article 156. The ecological technical standards for materials which are the object of this chapter will establish the procedures whose end is to prevent and control noise, vibration, thermal energy, lumination and odor pollution and will set the emission limits.

The Department of Health will carry out the necessary analysis, studies, investigations and enforcement with the objective of locating the origin or source, nature, grade, magnitude and frequency of the emissions in order to determine when harm to health is produced.

The Department in coordination with public or private, national or international, organizations will integrate the information related to this type of pollution, as well as the methods and control and treatment technology of the same.

FIFTH CAPTION—SOCIAL PARTICIPATION

SOLE CHAPTER

Article 157. The Federal Government will promote the participation and responsibility of society in the formulation of ecological policy, the application of its rules, in information and enforcement efforts, and in general, in the ecological actions which are imposed.

SIXTH CAPTION—CONTROL AND SECURITY METHODS AND SANCTIONS

CHAPTER I—OBSERVANCE OF THE LAW

Article 160. The provisions of this caption will be applied in the fulfillment of inspection and enforcement acts, execution of security methods, determination of administrative infractions and of commission of violations and their sanctions, and administrative

procedures and remedies, when matters of federal jurisdiction regulated by this Law are dealt with, except when other laws specifically regulate said questions, in relation to the matters which are dealt with by this same decree.

When matters of local jurisdiction, state governments, or councils are dealt with, the provision of this caption will be applied, in the laws which are expedited by local legislatures or, if it applies, in the edicts and regulations of enforcement and good government which are expedited by the councils.

CHAPTER II—INSPECTION AND ENFORCEMENT

Article 161. Federal entities and municipalities may carry out inspection and enforcement acts in order to verify compliance of this Law in matters of Federal order. Toward this end, the Federal Government and the federal entities, and with the intervention of the preceding, the municipalities, will develop pertinent coordination agreements.

Article 162. The appropriate authorities may carry out, under the auspices of duly authorized personnel, inspection visits, without jeopardizing other measures previously seen in the laws which may be carried out to verify the compliance of this decree.

Said personnel, upon carrying out the inspection visits, must be provided with the official document which identifies them as such, as well as with the duly written order of probable cause, issued by the appropriate authority in which the locale or area that is to be inspected is precisely identified, the objective of the action and the extent of it.

Article 163. The authorized personnel, upon beginning the inspection will duly identify himself to the person for whom the action is intended, will show the respective order and will give him a copy of the same, requiring him to designate two witnesses to the inspection.

In case of negation or in case the designees refuse to act as witnesses, the authorized personnel may designate them, making this situation known on the administrative document which is made out to this effect, and this circumstance will not invalidate the consequences of the inspection.

Article 164. For every inspection visit a document will be made out, in which the deeds or omissions which have occurred during the action are made known in a circumstantiated manner.

Upon concluding the inspection, opportunity will be afforded the person to whom the action was served to declare that which coincides with his rights in relation to those deeds set forth on the document.

Next, the document will be signed by the person for whom the action was intended, by the witnesses and by the authorized personnel, who will give a copy of the document to the interested party.

If the person for whom the action was served or the witnesses refuse to sign the document, or the interested party refuses to accept a copy of same, said circumstances will be recorded in it, without which its validity and probatory value is affected.

Article 165. The person for whom the action is intended will be obligated to permit the authorized personnel access to the place or places subject to inspection in the terms previously seen in the written order which has been referred to in Article 162 of this Law, as well as to give out all kinds of information which is conducive to the verification of compliance to this Law and to the rest of the applicable provisions, with the exception of that which is relative to the rights of industrial property which may be confidential conforming to the Law. The information must be maintained in strict confidence by the authority, if the interested party requests this, except in case of judicial requirement.

Article 166. The appropriate authority may ask for help from the police force to carry out the inspection visit, when someone or some persons hinder or oppose the execution of the action, independent of the sanctions that apply.

Article 167. Upon receipt of the inspection document by the issuing authority, it shall be required of the interested party, by means of personal notification or by certified mail with an acknowledgement of receipt, that he immediately adopt the corrective measures for urgent application, establishing and putting into effect the requirement and giving him opportunity, within a period of ten working days from the time when the consequences of said notice are effective to declare that which coincides with his rights in relation to the inspection document and offer proof in relation to the needs or omissions which are set forth in it.

Article 168. Once the presumed violator has been heard, the proof which is offered has been received and unencumbered, or in case the interested party has not made use of the right which has been granted to him by the previous article within the time period mentioned, the administrative resolution will be issued, within the following thirty working days, the interested party will be notified of the same personally or by certified mail.

Article 169. In the corresponding administrative resolution, the measures will be pointed out or, if necessary, added, which must be carried out in order to correct the observed deficiencies or irregularities, the time period granted to the violator to satisfy them and the sanctions which he brought upon himself, conforming to the applicable provisions.

Within the five working days which follow the expiration of the time period granted the violator in order to correct the observed deficiencies or irregularities, he must

communicate in writing and in a detailed manner to the issuing authority, to have complied with the ordered measures in the terms of the respective requirement.

When dealing with the second or subsequent inspection in order to verify the compliance with a requirement of previous requirements, and with the corresponding document if it is found that compliance has not been given to the measures previously ordered, the appropriate authority may impose the sanction or sanctions which are forthcoming conforming to Article 171 of this Law.

In cases that apply, the federal authority will make known to the Public Minister the committed acts or verified omissions which may make up one or more offenses.

CHAPTER III-SECURITY MEASURES

Article 170. When there exists impending risk for ecological imbalance or cases of pollution with dangerous repercussions to the ecosystems, its components, or the public health, the Department, as a security measure, may order the seizure of pollutant materials or substances, the partial or complete, temporary closure of the corresponding sources of pollutants, and promote the execution before the appropriate authority, in the terms of the related laws, of one or some of the security measures which are established in said decrees.

CHAPTER IV—ADMINISTRATIVE SANCTIONS

Article 171. Violations of the precepts of this Law, its regulations and provisions which are set forth in it, constitute a violation and may be administratively sanctioned by the Department in matters of National jurisdiction, which are not expressly reserved by another branch and, in the rest of the cases by the authorities of the federal entities and of the municipalities, in the exercise of their duties, and conforming to the local provisions which have been issued, with one or more of the following sanctions:

- I. A fine equivalent to twenty to twenty thousand days of general minimum wage currently in effect in the Federal District at the time of the imposition of the sanction;
- II. Temporary or permanent, partial or complete closure; and
- III. Administrative imprisonment for up to 36 hours.

If once the time period granted by the authority to correct the violation or violations which have been committed is up, and said violation or violations still exist, fines may be imposed for each day which passes without complying to the directive, the total of the

fines not to exceed the maximum permitted amount, conforming to Section I of this article.

In cases of recurrence, the amount of the fine may be up to two times the original amount imposed, not to exceed twice the permitted maximum, as well as complete closure.

Article 172. When the seriousness of the violation merits, the authority will petition from the one who had granted it, the suspension, revocation or cancellation of the concession, permit, license and in general the entire authorization granted for the fulfillment of commercial, industrial or service activities, or for the utilization of natural resources which have given way to the violation.

Article 173. For the imposition of the sanctions for violations of this law, the following will be taken into consideration:

- I. The seriousness of the violation, principally considering the criteria of impact on public health and the generation of ecological imbalance;
- II. The economic conditions of the violator; and
- III. The recurrence, if there is one.

Article 174. When temporary or permanent, total or partial, closure is imposed as a sanction, the personnel whose duty is to execute it will proceed to record a detailed document of the action, following the general guidelines established for the inspections.

Article 175. The Department may promote before the appropriate federal or local authorities based on the studies made for this end, the limitation or suspension of the installation or operation of industries, businesses, services, urban development or whatever activity which affects or may affect the environment or cause ecological imbalance.

CHAPTER V-REMEDY FOR DISAGREEMENT

Article 176. The resolutions which are decreed for the application of this Law, its regulations and the provisions which emanate from it may be appealed by the interested parties within the time period of fifteen working days following the notification date.

Article 177. The remedy for disagreement will be submitted in writing before the head of the administrative body which has decreed the appealed resolution, personally or by certified mail with return receipt, in which case the date of filing will be the day on which the written correspondence has been posted with the Mexican postal service.

Article 178. The written document in which the appeal is set forth will make known the following:

- I. The name and address of the appellant and, if it applies, that of the person who is petitioning in his name and representing him, duly authorizing the legal capacity under which he appears if it was not established before the authority which is familiar with the matter;
- II. The date on which the appellant swears to have received knowledge of the appealed resolution;
- III. The document or resolution which is disputed;
- IV. The damages which, in the judgement of the appellant, he will have to suffer as a result of the resolution or act with which he is charged;
- V. Reference to the authority which has decreed the resolution or ordered or executed the document;
- VI. The documents which the appellant offers as proof, which have immediate or direct relation with the disputed resolution or document which at the time were being processed and which were not included in his rebuttal in the writ which is referred to in Article 164 of this Law. Said documents must accompany the writ to which this article refers;
- VII. The proof which the appellant offers in relation to the disputed document or resolution, attaching the documents which are related to it; the declaration of the authority may not be offered as proof; and
- VIII. The request for suspension of the disputed document or resolution after proof that the fiscal interest, if necessary, has been guaranteed.

Article 179. Upon receipt of the appeal, the authorities who are familiar with this case will verify that it was filed on time or not, admitting it into the procedures or declining its admission.

In case it is admitted, the suspension will be decreed if it were in order, and the authority will unencumber the proof which has been admitted within a time period which does not exceed fifteen working days beginning with the date the notification of the admission was served.

Article 180. The execution of the disputed resolution may be suspended when the following requirements are complied with:

- I. The interested party so requests it;
- II. Damage to the general interest may not come to pass;
- III. It does not deal with recurring violations;
- IV. In the event the resolution is executed, it could cause harm to the appellant which would be difficult to remedy; and
- V. The fiscal interest be guaranteed.

Article 181. After the time period for unencumbering the proof, if there is any, passes, a resolution will be decreed in which the disputed resolution or document in conflict is confirmed, modified or revoked. The interested party will be notified of said resolution, personally or by certified mail.

CHAPTER VI—ABOUT VIOLATIONS OF THE FEDERAL ORDER

Article 182. In order to take the penal action against the violations portended in this chapter, it will be necessary that the Department previously formulate the corresponding accusation, except when cases of flagrant violation are dealt with.

Article 183. A penalty of three months to six years in prison and a fine, equivalent to 100 to 10,000 days of general minimum wage currently in effect in the Federal District will be imposed upon whomever, without obtaining the respective authorizations or violating the standard of security and applicable operation which are referred to in Article 147 of this Law, carry out, authorize or order the carrying out of activities which according to this same decree are considered risky, which cause serious harm to the public health, the flora or fauna or the ecosystems.

When the activities considered risky, to which the previous paragraph refers, are carried out in a population center, it may cause a penalty of up to three more years in prison and a fine of up to 20,000 days of general minimum wages currently in effect in the Federal District.

Article 184. A penalty will be imposed of three months to six years in prison and a fine equivalent to 1,000 to 20,000 days of general minimum wages currently in effect in the Federal District, on whomever manufactures, develops, transports, distributes, trades, stores, possesses, uses, reuses, recycles, collects, treats, throws out, throws away, disposes or in general carries out acts with dangerous materials or residuals which cause or may cause serious harm to the public health, to the ecosystems or its elements, without authorization from the Department or violating the terms under which he has been granted.

The same penalty will be imposed upon whomever violates the terms of authorization for importing or exporting dangerous materials or residuals which had been granted by the Department.

In cases in which the illegal behavior to which this article refers is related to dangerous or toxic substances which are alluded to in Article 456 of the general Health Law, with imminent risk to people's health, it will be that which is decreed in said Law.

Article 185. A penalty will be imposed of one month to five years in prison and a fine equivalent to 100 to 10,000 days of general minimum wages currently in effect in the Federal District, upon whomsoever, in violation of that which is established in the legal provisions, regulations and applicable technical standards, sends out, discharges into the atmosphere, or authorizes or orders the discharge of gases, smoke and dust which causes or may cause serious harm to the public health, the flora or fauna or the ecosystems.

Article 186. A penalty will be imposed of three months to five years in prison and a fine equivalent to 100 to 10,000 days of general minimum wages currently in effect in the Federal District, upon whomsoever without authorization of the appropriate authority and in violation of the legal provisions, regulations, and applicable technical standards, discharges, deposits or drains or authorizes or orders the discharge of residual waters, refuse, or pollutants into the soil, marine waters, rivers, river basins, waterways or the rest of the depositories or running waters under federal jurisdiction which cause or may cause serious harm to the public health, the flora or the fauna, of the ecosystems.

When water to be granted as a whole to population centers is dealt with, the penalty may be raised up to three more years.

Article 187. A penalty will be imposed of one month to five years in prison and a fine equivalent to 100 to 10,000 days of general minimum wages currently in effect in the Federal District, upon whomsoever, in violation of the applicable legal provisions and exceeding the set limits of the technical standards, generates emissions of noise, vibrations, thermal or lumination energy, in areas of federal jurisdiction, which cause serious harm to the public health, the flora or the fauna or the ecosystems.

Article 188. The National Congress, in matter concerning the Federal District, and the legislative bodies of the states concerning their jurisdiction, will expedite the laws which establish the penal and administrative sanctions for violations of this Law, in the matters of local order which it regulates. The local provisions which are expedited in agreement with the distribution of jurisdiction previously seen in this same decree, will point out the sanctions for violations of the same. The municipal governments will regulate the administrative sanctions for violations of the decrees and regulations of policy and good government, which at the same time are expedited in the exercise of their respective duties.

CHAPTER VII—PUBLIC ACCUSATION

Article 189. Anyone may denounce, before the Department or before other federal or local authorities according to their capacity, all deeds, acts or omission within the jurisdiction of the Federal government, which produce ecological imbalance or harm to the environment, violation of the provisions of this Law and the rest of the decrees which regulate matters related to the protection of the environment and the preservation and restoration of ecological balance.

If representation of the Department does not exist in the locale, the accusation may be formulated before the municipal authority or, upon the decision of the accuser, before the offices closest to said representation.

If the accusation was presented before the municipal authority and it turns out to be of federal order, it must then be forwarded for proceedings to the Department.

Article 190. Public accusation may be exercised by anyone, the only requirement to start the proceeding is to point out the necessary data to permit locating the source, as well as the name and address of the accuser.

Article 191. The Department, having once received the accusation, will proceed with those measures which are conducive, to identify the accuser and, in turn will inform the accused party or parties as well as the persons who might be affected by the result of the proceedings, about the undertaken action.

Article 192. The Department will effect the proceedings necessary to prove the deeds which have been denounced, as well as the corresponding evaluation.

If the deeds were under local jurisdiction, the Department will bring the accusation before the appropriate authority and will assist to bring about the execution of the measures that are called for by the law.

Article 193. The Department, no later than within fifteen working days following the presentation of the accusation, will make known to the accuser that procedure which has been given to it and, within the following thirty working days, the result of the verification of the deeds and imposed measures.

Article 194. When harm or damages have been caused by the violation of the provisions of this Law, the interested party or parties may request from the Department, the development of a technical analysis respectively, which will have the value of proof, in case it is presented in court.

Transitory Articles

FIRST. This Law will become effective the first day of March of Nineteen hundred eighty-eight.

SECOND. This abrogates the Federal Law for the Protection of the Environment, effective the thirtieth day of December of Nineteen hundred eighty-one, published in the Official National Publication on the eleventh of January of Nineteen hundred eighty-two, and repeals the rest of the legal provisions in those areas which oppose those of this Law.

Until the time when the local legislatures will dictate the laws, and the councils the statues, regulations and decrees for rules and good government, in order to regulate the matters which according to the provisions of this decree are under state and municipal jurisdiction, it will be the duty of the Federal Government to apply this Law in the area of local jurisdictions, in coordination for this purpose with the state authorities and, with the participation of the corresponding municipalities, according to the case.

THIRD. While the regulatory provisions of this Law are being expedited, those which have been in force up until now will continue to be in effect, in that which does not infringe upon this. The legal or regulatory references to the Federal Law for the Protection of the Environment, are considered applicable as far as possible to this Law.

FOURTH. All the administrative procedures and remedies related to the matters of this Law, which have been initiated under the terms of the Federal Law for the Protection of the Environment, will be carried out and resolved conforming to the provisions of said Law which is being abrogated.

Mexico, D.F. 22 of December of 1987. Deputy David Jimenez Gonzalez, President. Senator Armando Trasviña Taylor, President. Deputy Patricia Villanueva Abrajam, Secretary. Senator Guadalupe Gomez Maganda de Anaya, Secretary. Signatures".

In compliance with the decree in Part I of Article 89 of the Political Constitution of the United Mexican States, and for its due publication and observance, I expedite this decree in the office of the Federal Executive Branch in Mexico City, Federal District, on the twenty-third day of the month of December of Nineteen hundred eighty-seven.

(Signature)

The Secretary of Government

(Signature)

Manual Bartlett D.

We do hereby attest that, to the best of our knowledge and ability, this is a true and accurate translation of "LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y LA PROTECCIÓN AL AMBIENTE", decreed December 22, 1987, in Mexico, D. F.

(Signature)

Dr. Carina Ramírez

CITY OF EL PASO)
COUNTY OF EL PASO)

STATE OF TEXAS)

Sworn to before me this <u>28th</u> day of the month of <u>February</u> of 19_88_.

(Signature)

Christine L. Parrish
Notary Public

My commission expires 8/4/90

(Official seal: Notary Public)



The cover photograph was taken October 4, 1935, in Saguaro National Monument by the first National Park Service photographer, George Alexander Grant (1891-1964).



As the nation's principal conservation agency, the U.S. Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting fish, wildlife and plants, preserving the environmental and cultural values of national parks and historic places, and

providing for enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

